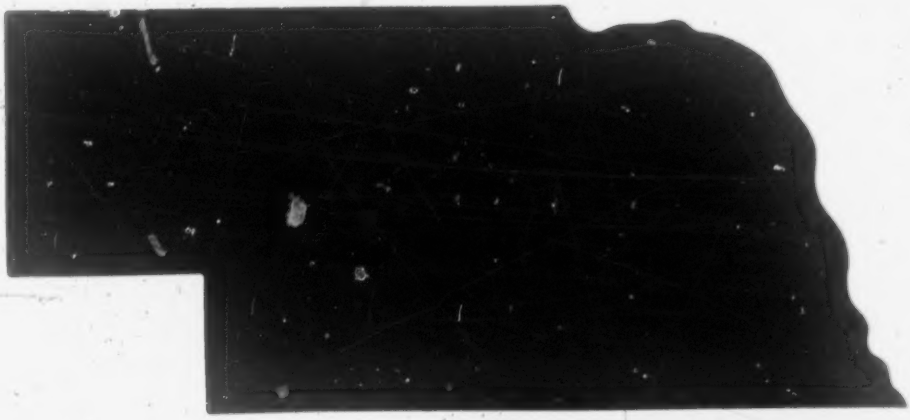
3/29/84 U78.70-1.40 A

NASIS



NEBRASKA ANNUAL SOCIAL INDICATORS SURVEY

Bureau of Sociological Research
Department of Sociology
University of Nebraska–Lincoln
Lincoln, Nebraska 68588-0325
Telephone: (402) 472-3672

NASIS-82, #9

NEBRASKANS AND HEALTH RISKS: SOCIAL INDICATORS OF HEALTH STATUS

Stephanie L. Shanks

and

Richard L. Meile
Department of Sociology

Price: $ .75

The Nebraska Annual Social Indicators Survey

Helen A. Moore - 1982 Study Director

The findings in this report are based on data collected in the sixth Nebraska Annual Social Indicators Survey (NASIS). This survey is part of an on-going study of the quality of life in Nebraska conducted by the Bureau of Sociological Research at the University of Nebraska-Lincoln.

The sample for NASIS consists of 1907 respondents eighteen years of age or older residing in households in Nebraska. The sample is selected through a process called random digit dialing: within each three-digit prefix in the state, four-digit numbers are selected randomly from all possible four-digit numbers to complete the telephone number. Respondents are further chosen randomly from the adults in the household and interviewed by telephone by experienced, professional interviewers from the offices of the Bureau of Sociological Research. All interviewing was done between February and April of 1982. This procedure produces a high-quality, representative sample of Nebraska adults. Analysis shows the sample to be representative of the state on age, sex, race, and geographical distribution.

The interview averaged approximately 47 minutes and included questions about energy use, health, recreation, political attitudes, occupation, education, family life, and other matters reflecting the quality of life experienced in the state. For the entire sample, the chances are 95 in 100 that the true value for the population lies within a range equal to the reported survey percentage plus or minus 2.24 percent. This is an estimate of maximum error and for most items the percentages are likely to be even more accurate.

The data gathered by NASIS are used by a wide variety of State and local government agencies for policy and program planning and by faculty and students at the University of Nebraska and other colleges for research. No information identifying any respondent is released to any user and the strict confidentiality of individual respondents is rigidly enforced. While the final responsibility for the organization and structure of the survey and for reports produced under its name rests with the Bureau of Sociological Research, public agencies and University departments play an integral part in planning the survey through an Advisory Committee. Public organizations interested in membership on the Advisory Committee should contact the NASIS Study Director.

Funding for NASIS comes from the University of Nebraska, the Bureau of Sociological Research and State and local agencies which buy items and data analysis from the survey.

The NASIS surveys are repeated each year to measure changes in the quality of life in Nebraska. While there is a core of questions which is included every year, each survey has a large component of unique items which address specific topical issues. Plans for future years include reinterviewing the 1977 panel every two years to assess changes in their lives. Additional detail on the NASIS surveys regarding use of the survey data or cost of purchasing items on future surveys can be obtained by contacting the NASIS Study Director at the Bureau of Sociological Research or by sending for a copy of the 1983 NASIS Prospectus.

Nebraskans and Health Risks: Social Indicators of Health Status

What percentage of the adult Nebraska population are at risk with one or more health problems that may result in serious illness and disability in the future? In 1982, as part of the Nebraska Annual Social Indicators Survey, information pertaining to health status and utilization of physician and hospital services was gathered from a random sample of 1907 adults. In addition, information concerning place of residence, marital status, social status, age and sex of respondent as well as number of doctor visits and times hospitalized was obtained from all respondents. With these data, we are able to describe the characteristics of persons who are at risk because of high blood pressure, overweight, fat-cholesterol, smoking of cigarettes or feelings of having a nervous breakdown. While health risk appraisal remains in its infancy, a "social mapping" of "at risk" populations can be of value to those individuals involved in health planning and prevention and may serve a useful health education purpose by sensitizing the general public to the scope of health risk problems in Nebraska (Fielding, 1982:337-339; Davis, 1979: 134).

Number at Risk

Five separate measures of health risk were used in this study: (1) self report of a nervous breakdown, (2) told (by a physician, nurse or someone else) had high blood pressure, (3) overweight, (4) how often limit intake of fat-cholesterol, and (5) smoke cigarettes. For a decade or more, public health and medical experts have stressed the link between these five risk factors and any number of serious illnesses such as heart disease or respiratory diseases, lung cancer and diabetes. Just how many

of the 1907 Nebraskans that participated in the study are at risk on at least one of these factors?

Over 14 percent of NASIS respondents (278) stated that they had ever felt like having a nervous breakdown. This percentage is similar to figures reported for studies of persons from other parts of the country. While one cannot conclude that anyone admitting to feelings of an impending nervous breakdown is mentally ill in a clinical sense, such feelings have been found to be statistically related to more detailed assessments of mental health status.

One quarter (25.1%) or 479 members of the sample said they had been told they had high blood pressure and 47.1% (898) admitted they were overweight. These two combined factors are indeed foreboding indicators of future health status, since the most recent screening research suggests that the majority of hypertensive people do not tend to seek medical care. Furthermore, those individuals who do seek treatment for hypertension have not generally complied with the "long term medication" due to the "symptom-free" nature of high blood pressure (Hershey et al., 1980; Kessner, 1976.223). Approximately 6 out of 10 respondents said they always or sometimes limit intake of fat-cholesterol, however, nearly one-fourth (23.3%) said they never limit cholesterol and another 14% said they rarely controlled their intake of fat-cholesterol. Some 28.4% or 542 persons smoked cigarettes. This figure is slightly lower than the national average.

Clearly a sizeable proportion of Nebraskans are at some risk of future illness because of feelings of nervousness, dietary habits, high blood pressure or smoking. Furthermore, as we will note in the next section, social and demographic factors are related to health risk.

Factors Related to Risk

A. Nervous Breakdown - The likelihood of being at risk depends, in part, on social background, age, and several other factors. Thus, while 14.2% of the entire sample "ever felt like having a nervous breakdown," only 9.4% of the rural non-farm sample had such feelings. Persons living in towns and cities were more likely (16.0%) to have ever felt like they had a nervous breakdown.

These feelings varied by age as well as place of residence. The youngest (18-30) and oldest (65 and over) age groups were the least likely to ever have felt like they had a nervous breakdown. The 41-55 year age group was the most at risk with 18.4% having ever felt that way.

Marital status and sex, also, effect likelihood of ever having felt an impending nervous breakdown. Dohrenwend and Dohrenwend (1976) reviewed the literature on sex effects and mental illness. They concluded that women tend to report depressive or neurotic conditions more often than men. The Nebraska sample was no exception with 20% of the females having felt they were having a nervous breakdown while only 8.9% of the males reported that emotive response. When marital status is considered, the divorced portion of the sample experienced such a feeling more often than people of other marital statuses. Nearly 30% (29.9%) of the divorced people had experienced feelings of having a nervous breakdown which compares with approximately 13% for the married and widowed.

The social standing of individuals based upon the occupational status of the household head was considered. As expected, lower status individuals were more at risk of a nervous breakdown (16.8%) than middle and high status individuals (13.1% for both statuses).

B. High Blood Pressure - Apparently farming or ranching is hard on the blood pressure, for 26.9% of our farmer-rancher respondents reported having been told they had high blood pressure. By contrast, only 17.9% of rural non-farm residents were at risk.

Age is positively related to being a risk with high blood pressure. 43.6% of the 65 and older age group were at risk while one in eight (12.8%) of the 18-30 age group had been told they had high blood pressure. There was but one inconsequential difference between the sexes in high blood pressure.

These findings are in line with a study by Sloan et al. (1969) which pointed to a community need for screening programs to consider social indicators, since "normal" diastolic ranges differ by age and sex.

Of the marital status groupings, the widowed and divorced were the high risk groups. Widowed were older and so their risk levels probably reflect age more than marital status. Being divorced is apparently bad for one's blood pressure as well as emotional status.

C. Overweight - While the trends in the distribution of blood pressure in the general population have been researched to a large extent, the weight distributions have been examined less frequently. Moffat et al. (1980) studied the effects of age and sex on weight using a height-weight index and skinfold thickness and found that females tend to be overweight more often than males and that there is a positive relationship between age and weight. While the Nebraska sample was asked about their weight perceptions rather than an objective physical state, our findings reflect similar trends with 52.4% of the females and only 41.6% of the males considering themselves to be overweight. By and large, with age comes an expanding waistline. Of those persons 56-64, 56.8% admitted

to being overweight while only 37.8% of the 19-30 year olds said that they were overweight.

Rural-urban differences were examined. Residing on a farm or ranch predisposes one to be overweight more often than is true of city dwellers or rural non-farm residents. While 47.2% of the total sample said that they were overweight, 51.5% of farm or ranch residents said they were "hefty."

Marital status appears to have an effect on the perception of body weight. Respondents who had never been married were the least likely to report being overweight (37.6%) with those separated having the greatest tendency toward a perceived excess of body weight (66.9%). As expected, divorced respondents had a high level of being overweight (50.8%). However, there was only a negligible difference between the divorced and married persons with 49.8% of those currently considering themselves to be overweight.

The findings on social status were surprising, since there was only a difference of 5% between the perceptions of high status and lower status individuals. Of the persons in a low occupational status, 44.2% reported being overweight while 49.3% of the high status individuals reported such a physical state.

D. Fat Cholesterol - Those in our sample who live in towns or cities are more likely to almost always limit (32.6%) intake of fat-cholesterol than rural non-farm (28.4%) or persons living on farms or ranches (24.4%). Age has a positive relationship on limiting intake. For age groups 18-30, approximately one in five (21.8%) almost always limit fat-cholesterol in their diets and by age group 56-64, 45.6%, nearly one-half, of the persons do. However, Hyman et al. (1982) found

that limiting the intake of fat-cholesterol is most effective in decreasing health risks for people below age 35. The greater proportion of persons 56-64 limiting their intake of fat-cholesterol may not reflect an improved health status for that segment over younger age categories. Women are much more conscious of the dangers of fat-cholesterol than men, 38.5% of them "almost always" limit fat-cholesterol while only 22.9% of the men say that they do. Marital status has no clear relationship to being at risk because of intake of fat-cholesterol, while social status is positively related. The higher the status, the greater the possibility of almost always limiting fat-cholesterol. It must be remembered that even though a reasonable percentage of the Nebraska sample reported compliance with a fat-controlled diet, studies have shown that individuals tend to provide socially acceptable responses to questions concerned with their eating habits (Hyman et al., 1982:158). The rate of compliance to a regimen may be less than these statistics suggest.

E. Smoking Cigarettes - Town and city residents are twice as likely as farm-ranch residents (31.3 to 15.4%) to smoke cigarettes. Age has but a modest association with smoking. By age 18 through 30, 30.1% are smoking. Of the 56-64 age group, 34.6% are doing likewise. While there have been some increases in the last 15 years in the number of women smokers, males in Nebraska still exceed females 31.3% to 25.7% (Holck et al., 1982). Divorce appears to be especially conducive to smoking while lower social status persons are half again as likely to smoke cigarettes as are high social status persons. Even though the majority of Nebraskans sampled were non-smokers, there are numerous health risks for those who do smoke because cessation programs have not been found particularly effective (Wynder and Hoffman, 1979).

CONCLUSION

This "social mapping" indicates that a large portion of the Nebraska population are engaged in behavior or exhibit physical malfunctions which lead to increased health risks. While health risks are important singly many in our sample compounded their risks by practicing numerous deleterious health behaviors (Kessner, 1976). Health planners and prevention agencies should be aware of the effects of these compounded risks upon the health status of the Nebraska population and for the delivery of health care services. Furthermore, individuals should consider ways of positively altering their health risk behaviors (Fielding, 1982).

Table 1.

Factors at Risk by Percent

Demographics	Nervous Breakdown	Blood Pressure	Over-Weight	Smoking	N
Sex					
Male	8.9	25.2	41.6	31.3	915
Female	20.0	27.0	52.4	25.7	992
Marital Status					
Married	13.0	27.2	49.8	28.0	1341
Widowed	13.3	48.2	40.9	14.4	115
Divorced	29.9	30.1	50.8	45.7	97
Separated	19.4	21.4	66.9	20.6	13
Never Married	16.9	13.4	37.6	30.1	334
Married, Living Apart	27.3	9.1	50.0	9.1	5
Social Status					
Low	16.8	27.7	44.2	35.8	592
Middle	13.1	23.4	48.0	26.2	914
High	13.1	29.1	49.3	24.0	286
Age					
18 - 30	13.9	12.8	37.8	30.1	600
31 - 40	15.5	19.9	46.7	30.5	348
41 - 55	18.4	27.2	56.3	32.2	437
56 - 64	12.3	41.9	56.8	34.6	226
65 +	11.4	46.3	46.5	12.0	290
Place of Residence					
Farm or Ranch	10.4	26.9	51.5	15.4	290
Rural Non-Farm	9.4	17.9	43.9	25.2	132
Town or City	16.0	26.8	46.7	31.3	1483
Total Percent	14.7	26.2	47.2	28.4	[1907]

Table 2.

The Limitation of Fat-Cholesterol by Percent

Demographics	Almost Always	Sometimes	Rarely	Never	N
Sex					
Male	22.9	29.4	15.7	32.1	915
Female	38.5	33.4	12.7	15.4	992
Marital Status					
Married	31.4	31.6	14.6	22.5	1341
Widowed	51.1	20.9	8.1	19.8	115
Divorced	31.1	27.0	12.2	29.7	97
Separated	31.9	52.5	7.5	8.1	13
Never Married	22.5	35.2	14.9	27.5	334
Married, Living Apart	36.4	36.4	27.3	0.0	5
Social Status					
Low	22.9	33.3	16.4	27.4	592
Middle	34.2	30.9	13.4	21.5	914
High	34.1	30.5	12.2	23.2	286
Age					
18 - 30	21.8	35.6	17.4	25.2	600
31 - 40	23.2	37.2	18.3	21.4	348
41 - 55	33.7	30.4	10.4	25.5	437
56 - 64	45.6	27.4	10.4	16.6	226
65 +	44.0	20.6	10.9	24.5	290
Place of Residence					
Farm or Ranch	24.4	32.8	14.2	28.5	290
Rural Non-Farm	28.4	31.4	13.9	26.3	132
Town or City	32.6	31.1	14.1	22.2	1483
Total Percent	31.0	31.5	14.1	23.4	[1907]

BIBLIOGRAPHY

Davis, Alan G.
1979 "An unequivocal change of policy: prevention, health and medical sociology." Social Science and Medicine 13A:129-137.

Dohrenwend, Bruce and Barbara Dohrenwend
1976 "Sex differences and psychiatric disorder." American Journal of Sociology 81:1447-1454.

Fielding, Johnathan E.
1982 "Appraising the health of health risk appraisal." American Journal of Public Health 72(4):337-339.

Hershey, John C. et al.
1980 "Patient compliance with antihypertensive medication." American Journal of Public Health 70(10):1081-1089.

Holck, Susan E. et al.
1982 "Lung cancer mortality and smoking habits: Mexican-American women." American Journal of Public Health 72(1):38-42.

Hyman, Martin D. et al.
1982 "Assessing methods for measuring compliance with a fat-controlled diet." American Journal of Public Health 72 (2):152-160.

Kessner, David M.
1976 "Screening high-risk populations: a challenge to primary care." Journal of Community Health 1(3)Spring:216-225.

Moffatt, Robert J.
1980 "Height, weight and skinfold thickness of Michigan adults." American Journal of Public Health 70(12):1290-1292.

Sloan, W. C. et al.
1969 "Epidemiologic methods in the study of blood pressure in relatives of toxemic primiparae." American Journal of Epidemiology 91:553-561.

Wynder, E. L. and D. Hoffman
1979 "Tobacco and health." New England Journal of Medicine. April 19:894-903.

List of reports already released using data gathered in the 1982 Nebraska Annual Social Indicators Survey. These may be purchased at the indicated price from the Bureau of Sociological Research at the University of Nebraska-Lincoln.

Report Number	Title
1.	Designs, Procedures, Instruments and Forms for the 1982 NASIS. Helen A. Moore. Price: $7.50.
2.	Attitudes Toward Social Security. Warren Luckner. Price: $1.25.
3.	Community Colleges and Higher Education. Helen A. Moore. Price: $1.00.
4.	The Status of Older Nebraskans. Jane C. Ollenburger and the Bureau of Sociological Research. Price: $1.50.
5.	Social Responses to Scarcity. Alan Booth. Price: $1.00.
6.	A Look at Nebraskan's Favorite Outdoor Recreational Activities. David R. Johnson and Laurie K. Scheuble.
7.	Social Security and Government Spending: The Elderly Speak Out. Jane C. Ollenburger and the Bureau of Sociological Research. Price: $ .75.
8.	Support for Programs Related to Alcohol Problems. Helen A. Moore. Price: $ .75.